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SIGHTINGS OF PILOT WHALES,
GLOBICEPHALA MELAENA (TRAILL, 1809),
IN THE LIGURIAN SEA, 1981-1988

(*Mammalia Cetacea*)

Abstract. — Thirty-two sightings of Pilot Whales in the Italian Northern waters are presented. Comments on the abundance of this species are reported.

Riassunto. — *Avvistamenti di Globicefali, Globicephala melaena (Traill, 1809), nel Mar Ligure dal 1981 al 1988.*

Vengono riportati 32 avvistamenti di Globicefali effettuati tra il 1981 ed il 1988 nelle acque liguri. Anche se la specie sembrerebbe diminuita, questa nota conferma la sua attuale presenza nell'area.

Key words: Pilot Whales, *Globicephala melaena*, Ligurian Sea.

The Pilot Whale, *Globicephala melaena* (Traill, 1809), is considered a common species in the Mediterranean, even if its distribution proves to be quite fragmentary. This cetacean does not seem to be present in the eastern Mediterranean (MARCHESSAUX & DUGUY, 1978), while in the western part its presence was often reported in the past (CASINOS & VERICAD, 1976; CYRUS, 1976; DUGUY, 1977; DUGUY et al., 1983; RAGA et al., 1983; VIALE & BARDIN, 1983). As regards Italian waters it seemed more numerous in the Ligurian Sea and in southern seas, around Sicily (CAGNOLARO et al., 1983; DI NATALE, 1983).

Recently the reports of sightings of Pilot Whales appeared to be decreasing in the areas which were previously considered as the most populated. To all Members of the Committee of Marine Vertebrates and Cephalopods of the International Commission for the Scientific Explora-

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tion of the Mediterranean Sea was also suggested to give particular attention to the study concerning the Pilot Whales. In this connection we think it should be useful to give the information we have concerning this species.

In table I we list the sightings recorded in the Ligurian Sea between 1981 and 1988. In the 4th column, number of specimens, we can remark that, with the exception of a few cases, the schools were not very numerous. The average length of the Pilot Whales sighted (column 3) refers to the sizes of most specimens, while the presence of calves or young individuals is shown in the 5th column (notes) together with behavioural notes. Calves were seen in July, September and December and this corroborates the theory according to which no birth season exists.

As far as the distribution of these sightings is concerned (fig. 1), it is interesting to notice that, even if most of them occurred in very deep waters (more than 1000 meters), some were very close to the coast.

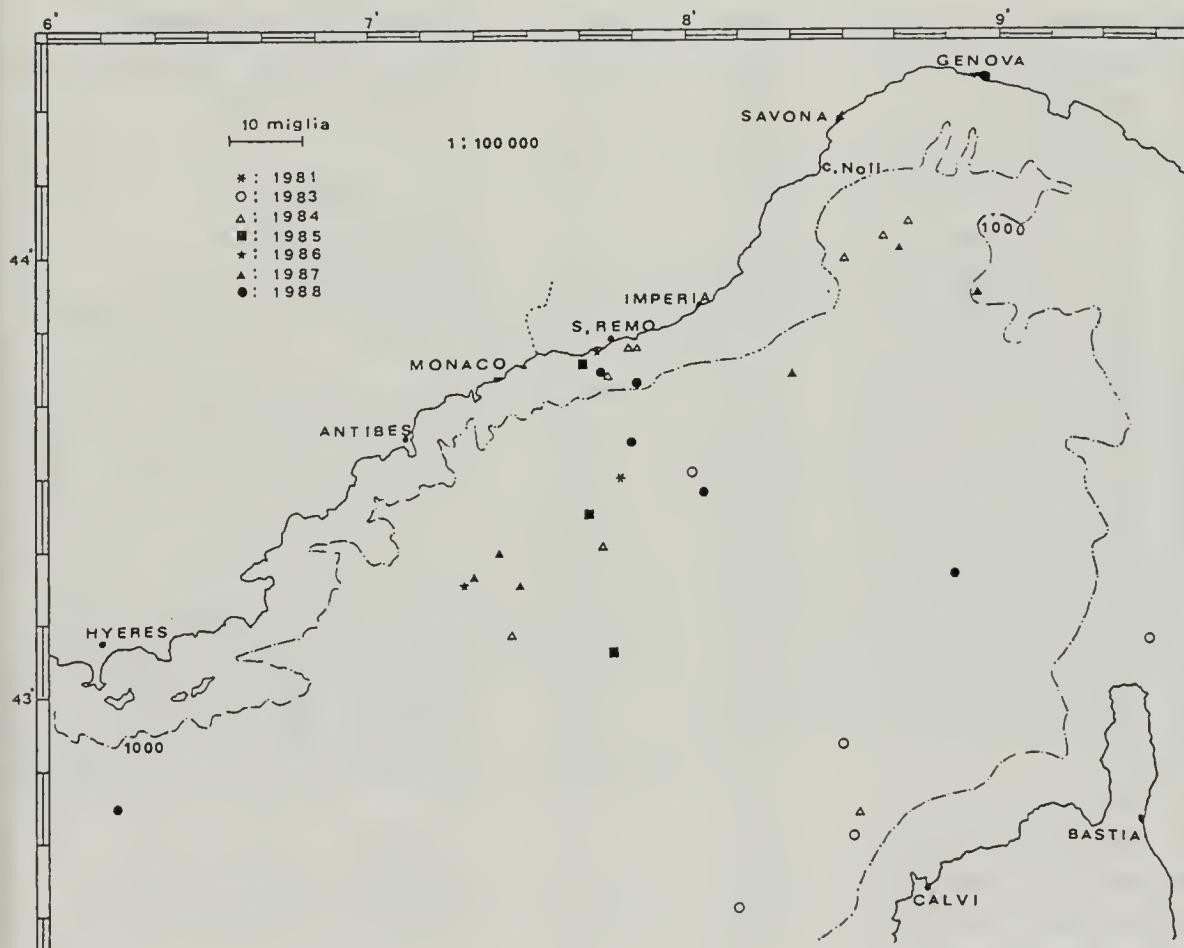


Fig. 1. — Distribution of the sightings of Pilot Whale per year; we do not have data for the Eastern Ligurian Sea.

TABLE I. — *Globicephala melaena* sightings, 1981-1988, in the Ligurian Sea.

Date	Coordinates		Average length of specs.	Number of specs.	Notes
—.09.81	43° 29' N	007° 47' E	4-6 m	10	Spy-hopping, lobtailing
03.07.83	42° 50' N	008° 32' E	5-6 m	3	
10.07.83	43° 14' N	009° 19' E	5 m	11	Spy-hopping
11.07.83	42° 30' N	008° 10' E	5-6 m	10	
18.07.83	42° 53' N	008° 30' E	6 m	2	
27.07.83	43° 30' N	008° 00' E	5-6 m	5	
20.07.84	43° 48' N	007° 50' E	5-6 m	1	1 mile off the coast, swimming in circle (h. 09.30)
20.07.84	43° 48' N	007° 51' E	5-6 m	1	1 mile off the coast, swimming in circle (h. 17.30)
21.07.84	43° 20' N	007° 43' E	5-6 m	11	Spy-hopping, whistling
22.07.84	43° 09' N	007° 27' E	4-6 m	50	1 calf, whistling, with 50 <i>S. coeruleoalbus</i>
22.07.84	43° 43' N	007° 44' E	5-6 m	1	Swimming in circle
30.08.84	43° 53' N	008° 32' E	5-7 m	25	
02.09.84	44° 08' N	008° 48' E	5-6 m	17	Fast travelling
02.09.84	44° 05' N	008° 42' E	5-7 m	10	Fast travelling
02.09.84	44° 00' N	008° 30' E	5-7 m	20	Some calves
01.06.85	43° 45' N	007° 39' E	4-6 m	5	« Resting » at the surface
04.09.85	43° 25' N	007° 41' E	6 m	2	
15.09.85	43° 05' N	007° 47' E	5-6 m	9	Three young specimens
28.06.86	43° 48' N	007° 43' E	4-5 m	1	700 meters from the coast
19.09.86	43° 14' N	007° 18' E	4-6 m	20	
02.08.87	43° 56' N	008° 23' E	5-6 m	2	
19.08.87	44° 01' N	008° 40' E	5-7 m	4	
12.09.87	43° 14' N	007° 29' E	5-6 m	40	Spy-hopping, whistling, loose in pods
14.09.87	43° 19' N	007° 24' E	5-7 m	35	Whistling, loose in pods
14.09.87	43° 15' N	007° 20' E	5-6 m	15	Whistling, loose in pods
08.12.87	43° 55' N	008° 56' E	5-6 m	100	Whistling, some calves and young sp.
04.06.88	42° 44' N	006° 12' E	5-6 m	2	
23.07.88	43° 44' N	007° 52' E	5-6 m	30	« Resting » at the surface
26.07.88	43° 28' N	008° 04' E	4-6 m	8	« Resting » at the surface
01.08.88	43° 17' N	008° 57' E	4-6 m	50	
10.08.88	43° 34' N	007° 51' E	4-6 m	20	
12.09.88	43° 44' N	007° 43' E	6-7 m	2	

Looking at table II, which takes into consideration the number of specimens in relation to the number of sightings, we can remark that in the last two years there was a considerable increase in the total number of whales (12 sightings and 308 specimens), while in 1983, for example, there had been 5 sightings and only 31 specimens observed.

TABLE II. — Sightings and specimens per year.

Years	Number of specimens	Number of sightings
1981	10	1
1982	—	—
1983	31	5
1984	136	9
1985	16	3
1986	21	2
1987	196	6
1988	112	6
	522	32

Even if the species turns out to be reduced in number, it is still present in the Ligurian Sea, with the possibility of an increase.

The analysis of the strandings occurred in the area might attest the rarity of Pilot Whales as only one specimen was found between 1981 and 1987 (CAGNOLARO et al., 1986; CENTRO STUDI CETACEI, 1987, 1988). And yet, in 1988 nine specimens were found entangled in the fishing nets used in this area (unpublished personal data). If we consider the strandings on the French Mediterranean coasts, the situation seems to be similar (DUGUY, 1982, 1983, 1984, 1985, 1986, 1987, 1988). However the data concerning strandings or catches might not be completely meaningful to determine the abundance of the species. Actually, between 1978 and 1982, when several sightings were recorded, there was a very limited number of strandings (DI NATALE, 1983).

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REFERENCES

- CAGNOLARO L., COZZI B., MAGNAGHI L., PODESTÀ M., POGGI R. & TANGERINI P., 1986 - Su 18 Cetacei spiaggiati sulle coste italiane dal 1981 al 1985. Rilevamento biometrico ed osservazioni necroscopiche (*Mammalia Cetacea*) - *Atti Soc. ital. Sci. nat. Museo civ. Stor. nat. Milano*, 127: 79-106, 11 figg., 3 tab.
- CAGNOLARO L., DI NATALE A. & NOTARBARTOLO DI SCIARA G., 1983 - Cetacei - Guide per il riconoscimento delle specie animali delle acque lagunari e costiere italiane, 9 - C.N.R., Roma, 186 pp., 50 figg. b.n., 12 figg. col.
- CENTRO STUDI CETACEI, 1987 - Cetacei spiaggiati lungo le coste italiane. 1. Rendiconto 1986 - *Atti Soc. ital. Sci. nat. Museo civ. Stor. nat. Milano*, 128: 305-313, 1 fig., 1 tab.
- CENTRO STUDI CETACEI, 1988 - Cetacei spiaggiati lungo le coste italiane. 2. Rendiconto 1987 - *Atti Soc. ital. Sci. nat. Museo civ. Stor. nat. Milano*, 129: 411-432.
- CASINOS A. & VERICAD J.-R., 1976 - The Cetaceans of the Spanish coasts: a survey - *Mammalia*, 40: 268-289, 9 figg.
- CYRUS J.-L., 1976 - Déplacement des dauphins en bordure des côtes françaises de Méditerranée - *Rapp. Comm. int. Mer Médit.*, 23 (8): 85.
- DI NATALE A., 1983 - New information about Pilot Whale, *Globicephala melaena* Traill, in the central Mediterranean Sea - *Rapp. Comm. int. Mer Médit.*, 28: 195-196.
- DUGUY R., 1977 - Notes on the Small Cetaceans off the Coasts of France - *Rep. Int. Whal. Commn.*, 27: 500-501.
- DUGUY R., 1982 - Rapport Annuel sur les Cétacés et Pinnipèdes trouvés sur les côtes de France - XI, année 1981 - *Ann. Soc. Sci. nat. Charente-Maritime*, 6: 969-984.
- DUGUY R., 1983 - Ibidem, 7: 121-135.
- DUGUY R., 1984 - Ibidem, 7: 189-205.
- DUGUY R., 1985 - Ibidem, 7: 349-364.
- DUGUY R., 1986 - Ibidem, 7: 507-522.
- DUGUY R., 1987 - Ibidem, 7: 617-639.
- DUGUY R., 1988 - Ibidem, 7: 753-769.
- DUGUY R., CASINOS A., DI NATALE A., FILELLA S., KTARI-CHAKROUN F., LLOZE R. & MARCHESSAUX D., 1983 - Repartition et fréquence des Mammifères marins en Méditerranée - *Rapp. Comm. int. Mer Médit.*, 28: 223-230.
- RAGA J. A., RADUAN M. A. & BLANCO C., 1983 - Nouvelles données sur des observations des cétacés dans la Méditerranée - *Rapp. Comm. int. Mer Médit.*, 28: 213-214.
- VIALE D. & BARDIN J.-P., 1983 - Recensement des cétacés par observation visuelle à partir d'un bateau de ligne entre les côtes française et corse - *Rapp. Comm. int. Mer Médit.*, 28: 215-216, 1 fig.